Please take a few minutes to read this month’s report on patient care quality. You’ll soon discover why Licking Memorial Hospital is measurably different for your health!

Visit us at www.lmhealth.org

Consuming too much sodium adds to the strain already on the hearts of chronic heart failure (CHF) patients. These tips from the American Heart Association can help you reduce your sodium intake and have a healthier heart, regardless of CHF:

• Avoid high-sodium foods, such as canned soups and dry soup mixes, ham, bacon, sausage, canned meats, processed meats, baking mixes, snack foods and fast foods.
• Take the salt shaker off the dinner table.
• Do not add salt to your cooking.
At Licking Memorial Hospital, we take pride in the care we provide. To monitor the quality of that care, we track specific quality measures and compare them to benchmark measures. Then we publish them so you can draw your own conclusions regarding your health care choices.

The Centers for Disease Control and Prevention estimate that approximately 5 million people in the United States have chronic heart failure (CHF), in which the heart’s ability to function is weakened. Although CHF affects patients’ health in many ways, proper care can improve both quality and length of life. A low rate of readmission to the hospital within 30 days for the same or related condition is one indicator of quality care in the hospital and of quality follow-up care after dismissal.

1

This indicator measures the average number of days CHF patients are hospitalized during each inpatient stay. Length of stay is one indicator a hospital should consider in determining if it is using resources for inpatient care appropriately. CHF average length of stay should be close to the benchmark.

<table>
<thead>
<tr>
<th>% Inpatient readmissions for CHF patients</th>
<th>LMH 2001</th>
<th>LMH 1/02-11/02</th>
<th>National Benchmark (1)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>17.6%</td>
<td>17.2%</td>
<td>10.5%</td>
</tr>
</tbody>
</table>

2

Inpatient mortality measures the percentage of inpatient deaths among all CHF patients admitted to Licking Memorial Hospital.

<table>
<thead>
<tr>
<th>CHF inpatient mortality</th>
<th>LMH 2001</th>
<th>LMH 1/02-11/02</th>
<th>National Benchmark (1)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>4.1%</td>
<td>4.5%</td>
<td>3.9%</td>
</tr>
</tbody>
</table>

3

Beta blocker medications can reverse or prevent some of the health effects associated with heart failure. Patients treated with beta blockers may see significant improvement in heart function after three months. If a high number of patients is taking beta blockers when admitted to the hospital for CHF, this indicates increased quality of care by the health care community as a whole. It also indicates success in patient education, resulting in better patient compliance with physician orders.

<table>
<thead>
<tr>
<th>CHF patients admitted on beta blockers</th>
<th>LMH 2001</th>
<th>LMH 1/02-11/02</th>
<th>State Benchmark (3)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>46.8%</td>
<td>62.3%</td>
<td>18.8%</td>
</tr>
</tbody>
</table>

Other medications beneficial to many CHF patients are angiotensin-converting enzyme (ACE) inhibitors, angiotensin-receptor blockers (ARBs) and aspirin. ACE inhibitors and ARBs have been shown to lower mortality and improve functional capacity and quality of life. Aspirin can prevent blood clotting in those patients with underlying coronary artery disease (CAD).
Newark resident Gene Johnson enjoys participating in Licking Memorial Hospital’s cardiac rehabilitation program because he says getting exercise has improved his health and made living with CHF easier.

“CHF is an everyday ailment that calls for everyday attention to physical activity, diet, and weight.”

Although Gene Johnson began participating in Licking Memorial Hospital’s 12-week cardiac rehab program more than 40 weeks ago, he’s not finished and doesn’t plan to be.

“I went through the three-month program and then decided to continue on my own,” the 84-year-old Newark resident said.

Cardiac rehab participants use treadmills, stationary bikes and arm strengthening equipment to improve blood circulation and increase physical stamina.

“I rather like it,” Gene said of the program. “I get to be loosened up, and apparently it’s doing what it’s supposed to do – which, in my case, is to keep my blood pressure at a certain point. And, I feel better when I do it.”

Gene has chronic heart failure (CHF) – a condition in which the heart is weakened so that it doesn’t pump blood as efficiently as it should.

In CHF, blood returning to the heart backs up, or congests, in the veins. Excess fluid is forced from the blood vessels into tissues – usually in the feet and legs and abdomen – resulting in swelling. Blood also can back up in the blood vessels of the lungs, forcing fluid into the lungs and causing shortness of breath. The kidneys may not eliminate fluids from the body well, compounding the problem of excess fluid elsewhere.

Regular exercise is helpful to CHF patients because it improves blood flow, said LMH Cardiology Patient Care Supervisor Patty Merrick, C.N.P. She is pleased that Gene has continued cardiac rehab participation.

“Some patients go through the 12-week program and think they’ve finished what they needed to do,” Merrick said. “The truth is that they’ve just begun. CHF is an everyday ailment that calls for everyday attention to physical activity, diet, and weight.”

Because of continued participation in cardiac rehab, Gene has more energy.

“I still like to take naps, but I don’t have to take nearly as many,” he said of his progress.

He now has enough energy to do two or three crossword puzzles a day, read, assist with his church’s weekly after-school program and take day trips with his wife, Eva.

A goal Gene has set for himself for 2003 is to again play golf – something he hasn’t been able to do in more than a year.
Using BNP to Fight CHF

BNP is a cardiac peptide released by the heart ventricles when they expand beyond normal volume and are overloaded with pressure. The result is shortness of breath – one of the most common symptoms of CHF – a chronic, progressive disease in which blood is not pumped efficiently throughout the body because of weakened heart muscle. In addition to shortness of breath, symptoms include overwhelming fatigue and swelling.

CHF can be difficult to diagnose because its symptoms are similar to those of other serious diseases, including chronic obstructive pulmonary disease. However, distinctive BNP levels allow for a more rapid diagnosis. As a result, proper treatment can begin more readily.

"Even the most skilled physicians can sometimes have trouble diagnosing acute heart failure," said Bryce Morrice, M.D., a cardiologist with LMH. "This is the first blood test available for either confirming acute heart failure or ruling it out as a cause for shortness of breath."

BNP can be used as a non-invasive treatment for CHF for some patients. The injected BNP dilates the blood vessels, clearing the fluid in the lungs and improving blood flow. Individuals with very low heart output and low blood pressure are not candidates for this treatment, Dr. Morrice said.

"The sooner we know whether a patient has CHF, the sooner we can begin appropriate treatment," said LMH Cardiology Patient Care Supervisor Patty Merrick, C.N.P.

According to the American College of Emergency Physicians, CHF is the most frequent cause of hospitalization in the elderly, with 900,000 hospitalizations and 250,000 deaths each year.

BNP as a Treatment for CHF

BNP can be used as a non-invasive treatment for CHF for some patients. The injected BNP dilates the blood vessels, clearing the fluid in the lungs and improving blood flow. Individuals with very low heart output and low blood pressure are not candidates for this treatment, Dr. Morrice said.

"The sooner we know whether a patient has CHF, the sooner we can begin appropriate treatment," said LMH Cardiology Patient Care Supervisor Patty Merrick, C.N.P.

According to the American College of Emergency Physicians, CHF is the most frequent cause of hospitalization in the elderly, with 900,000 hospitalizations and 250,000 deaths each year.

BNP as a Treatment for CHF

BNP can be used as a non-invasive treatment for CHF for some patients. The injected BNP dilates the blood vessels, clearing the fluid in the lungs and improving blood flow. Individuals with very low heart output and low blood pressure are not candidates for this treatment, Dr. Morrice said.

"The sooner we know whether a patient has CHF, the sooner we can begin appropriate treatment," said LMH Cardiology Patient Care Supervisor Patty Merrick, C.N.P.

According to the American College of Emergency Physicians, CHF is the most frequent cause of hospitalization in the elderly, with 900,000 hospitalizations and 250,000 deaths each year.

BNP as a Treatment for CHF

BNP can be used as a non-invasive treatment for CHF for some patients. The injected BNP dilates the blood vessels, clearing the fluid in the lungs and improving blood flow. Individuals with very low heart output and low blood pressure are not candidates for this treatment, Dr. Morrice said.

"The sooner we know whether a patient has CHF, the sooner we can begin appropriate treatment," said LMH Cardiology Patient Care Supervisor Patty Merrick, C.N.P.